



TITLE:

# Emeritus Professor Tatsuo Yamamoto, Cover & Contents

AUTHOR(S):

---

CITATION:

Emeritus Professor Tatsuo Yamamoto, Cover & Contents. Bulletin of the Institute for Chemical Research, Kyoto University 1980, 58(3)

ISSUE DATE:

1980-05-31

URL:

<http://hdl.handle.net/2433/76904>

RIGHT:

# BULLETIN OF THE INSTITUTE FOR CHEMICAL RESEARCH

KYOTO UNIVERSITY

Vol. 58, No. 3

*Commemoration Issue Dedicated to  
Professor Tatsuo YAMAMOTO  
on the Occasion of his Retirement*

*Published bi-monthly by*  
THE INSTITUTE FOR CHEMICAL RESEARCH  
KYOTO UNIVERSITY  
KYOTO, JAPAN

May, 1980

*(Bull. Inst. Chem. Res., Kyoto Univ.)*

# INSTITUTE FOR CHEMICAL RESEARCH KYOTO UNIVERSITY

## Director

Toshio TAKADA

## Members of Council

Yoshichika BANDO	Eiichi FUJITA	Hiroshi INAGAKI
Yuzo INOUE	Ryozo KITAMARU	Naokazu KOIZUMI
Michio KURATA	Shinzaburo OKA	Masaya OKANO
Tatsuo OOI	Toshio TAKADA	Mitsuru TAKANAMI
Hidekuni TAKEKOSHI	Tohru TAKENAKA	Yoshimasa TAKEZAKI
Megumi TASHIRO	Natsu UYEDA	Takuji YANABU

## Publication Committee

Masafumi ARAKAWA	Ryozo KITAMARU	Masakazu MATSUI
Kenji SODA	Hidekuni TAKEKOSHI	Tohru TAKENAKA

## Business Staff

Tetsuo FUJIMOTO	Seiji IJIRI	Shoichi MATSUMURA
-----------------	-------------	-------------------

## History of Publications

Term	Vol.	Title	Published
Jan., 1929- Dec., 1947	1-16	化学研究所講演集 (The Reports of the Institute for Chemical Research)	Indeterminately
April, 1933	—	10 Jahre Institut für chemische Forschung (化学研究所創立十周年記念号)	—
March, 1949- Dec., 1949	17-19	化研講演集 (The Reports of the Institute for Chemical Research)	Indeterminately
March, 1950- Sept., 1952	20-30	化学研究所報告 (Bulletin of the Institute for Chemical Research)	Quarterly
Dec., 1951	—	The Commemoration Volume for the Silver Jubilee (化学研究所創立二十五周年記念号)	—
Jan., 1953 onwards	31 No. 1-	Bulletin of the Institute for Chemical Research (化学研究所報告)	Bi-monthly
Nov., 1966	44 No. 6	Special Issue on the Commemoration of the Fortieth Anniversary (化学研究所創立四十周年記念号)	—
Nov., 1976	54 No. 6	Special Issue on the Commemoration of the Fiftieth Anniversary (化学研究所創立五十周年記念号)	—



山本龍男教授  
Professor Dr. Tatsuo Yamamoto

## Emeritus Professor Tatsuo Yamamoto

Dr. Tatsuo Yamamoto retired on the first of April, 1980 under the age limit after his 36 years' service at Kyoto University, and has been granted the title of professor emeritus by the University.

Dr. Yamamoto was born in Nara on June 26, 1916. He graduated from Kyoto University with his major in agricultural and biological chemistry in December of 1941, and joined Professor H. Katagiri's laboratory as a research associate at the Institute for Chemical Research, Kyoto University. He studied on microbial retting and some other related problems. Then he moved to Kochi University as a lecturer in 1950, and became an associate professor in 1951 and a full professor in 1956. For this decade at the Laboratory of Applied Microbiology, Department of Agricultural and Biological Chemistry, Kochi University, he and his co-workers including Professor Susumu Nagasaki investigated the structure and function of yeast cells, in particular the fine structure of the cell walls by electron microscopy and application of yeasts, and he received a doctoral degree of agriculture from Kyoto University for his study on microbial chemistry in 1956.

Dr. Yamamoto was appointed a professor of Laboratory of Microbial Biochemistry, Institute for Chemical Research, Kyoto University in 1960. For the past twenty years, his studies have been focused on the enzymological aspects of microbial amino acids and nitro compounds metabolism. He and his collaborators have discovered the occurrence of several novel enzymes such as L-lysine:  $\alpha$ -ketoglutarate aminotransferase, arginine racemase, amino acid racemase with low substrate specificity, acetyl CoA: S-( $\beta$ -aminoethyl)-L-cysteine  $\omega$ -N-acetyltransferase,  $\alpha$ ,  $\epsilon$ -diaminopimelate D-dehydrogenase and 2-nitropropane dioxygenase from various microorganisms, and purified them to homogeneity and crystallized. They elucidated their enzymological properties, structures, and reaction and regulation mechanisms. The application of microbial enzymes, *e.g.*, enzymatic synthesis and analysis of amino acids and use of microbial enzymes as an antineoplastic agent, also were investigated intensively.

Dr. Yamamoto gave lectures on microbial biochemistry at the Graduate School of Agricultural and Biological Chemistry since 1960, and supervised the dissertation works of many graduate students. He served as a visiting lecturer at many universities such as Ryukyu University and Kyoto Women's University, and also contributed greatly to the national and international meetings.

This collection of papers by his colleagues and friends is dedicated to Dr. Yamamoto in honor of his sincere service for a long period and retirement.

April, 1980



Toshio Takada  
Director  
Institute for Chemical Research  
Kyoto University

# CONTENTS

## Commemoration Issue Dedicated to Professor Tatsuo Yamamoto on the Occasion of his Retirement

Shigeo Tanimoto, Tatsuo Oida, Toshio Kokubo, Toyonari Sugimoto, and Masaya Okano: Diels-Alder Addition of N,N-Diethyl-1,3-butadienylamine to Dehydroaromatic Intermediates Generated from Some Haloaromatics .....	289
Nobuharu Ando, Satoshi Ohi, Yukio Yamamoto, Jun'ichi Oda, and Yuzo Inouye: Synthesis and Complexation Stereochemistry of Crown Ethers...	293
Ken Nishikawa, Motohisa Oobatake, and Tatsuo Ooi: Method for Energy Computation of Protein Structures. A Set of Amino Acid Geometries and Energy Parameters .....	308
Haruo Misono, Yoshiyasu Kawabata, Mitsuyoshi Toyosato, Tatsuo Yamamoto, and Kenji Soda: Purification and Properties of L-Methionine Decarboxylase of <i>Streptomyces</i> sp. ....	323
Shinpei Yamamoto, Yoshikazu Yuki, and Susumu Nagasaki: Purification and Properties of a Yeast Cell Lytic Enzyme from <i>Pellicularia sasaki</i> .....	334
Shinpei Yamamoto, Yoshikazu Yuki, and Susumu Nagasaki: Action Pattern of a Yeast Cell Lytic Enzyme from <i>Pellicularia sasaki</i> .....	343
Susumu Nagasaki, Yoshikazu Yuki, and Shinpei Yamamoto: Some Properties of a Yeast Cell Lytic Enzyme from <i>Pellicularia sasaki</i> , Especially Referring to Thermal Denaturation .....	351
Makoto Fushimi, Naomichi Baba, Jun'ichi Oda, and Yuzo Inouye: Asymmetric Reduction of $\alpha$ -Keto-esters and Trifluoroacetophenone with <i>N</i> -anionized Hantzsch ester .....	357
Masaaki Yasuda, Seizen Toyama, Kazuo Yonaha, and Kenji Soda: Purification and Crystallization of L-Ornithine: $\alpha$ -Ketoglutarate $\delta$ -Aminotransferase from <i>Corynebacterium Sepedonicum</i> .....	366
Eiichi Takenouchi, Donka K. Nikolova, Hidehiko Tanaka, Tatsuo Yamamoto, and Kenji Soda: Mechanism of Lysine Overproduction by a Yeast Mutant Resistant to a Lysine Sulfur Analog .....	371
<b>Communication</b>	
Naomichi Baba, Jun'ichi Oda, and Yuzo Inouye: NADH Model Studies: 1,4-Dihydronicotinamide Covalently Bonded to a Cyclic Peptide, Bacitracin .....	379
<b>Note</b>	
Naomichi Baba, Taketoshi Makino, Jun'ichi Oda, and Yuzo Inouye: A Note on the Difference in Reactivity of Dihydronicotinamide $\beta$ -D-glucopyranoside and Its Acetylated Form .....	382

Naomichi Baba, Taketoshi Makino, Jun'ichi Oda, and Yuzo Inouye: 1-D-Glucopyranosyl-1,4-dihydronicotinamides as Chiral NADH Model and Their Asymmetric Reactions with Prochiral Substrates .....	386
---	-----

#### **Review**

Norio Kurihara and Minoru Nakajima: Biodegradation of Lindane ( $\gamma$ -BHC) and its Isomers in Mammals and Insects .....	390
Takamitsu Yorifuji: Bacteria Amidinohydrolases and Their Plausible Evolutionary Relationships .....	418
Yoshikazu Izumi, Yoshiki Tani, and Hideaki Yamada: Biotin Biosynthesis Microorganisms .....	434

京都大学化学研究所報告 第58巻 第3号

昭和55年5月25日 印刷

【非売品】

昭和55年5月31日 発行

京都府宇治市五ヶ庄

京都大学化学研究所

編集兼発行人 高 田 利 夫

〒553 大阪市福島区吉野1丁目2-7

印刷所 日本印刷出版株式会社

電話 (06) (441) 6594番 (代表)

大阪市福島区吉野1丁目2-7

印刷者 小 林 積 造